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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,632	04/24/2006	Guenther Weiss	10191/4152	8448
26646 7590 12/14/2007 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			EXAMINER PIERRE LOUIS, ANDRE	
			ART UNIT 2123	PAPER NUMBER
			MAIL DATE 12/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,632

Applicant(s)

WEISS ET AL.

Examiner

Andre Pierre-Louis

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 10/29/2007 has been received and fully considered.
2. Claims 1-13 were previously and remain cancelled; claims 22 and 26 are also cancelled.
3. Now, claims 1-13, 22 and 26 are cancelled in the instant application; and claims 14-21 and 23-25 are pending and presented for examination.
4. Regarding the objection to the claims, the Examiner withdraws the objection in view of the amendment.
5. As per the rejection under 35 USC 101, the Examiner maintains some of the rejection, as Applicant fails to overcome the rejection (*see further clarification below*).
6. With regards to the rejection under 35 USC 112, the Examiner maintains some of the rejection, as Applicant fails to overcome the rejection (*see further clarification below*).

Response to Arguments

7. Applicant's arguments filed 10/29/2007 have been fully considered but they are not persuasive.

7.1 Applicant argues that Brayton reference does not identically disclose (nor suggest) the claim features of a plurality of simulation process, the corresponding memory modules, and copying signal values from one memory to another, the Examiner respectfully notes that Brayton et al. discloses a system for control system simulation, testing and operator training (*see title*), comprises a plurality of simulation modules 120 of figures 3-4 and further comprises a plurality of simulation processes to include the simulation of HMI portion of a control system plant, and the simulating the entire plant (*see for example col.10 lines 14-61*). Brayton et al. continues to substantially disclose the simulation are performed using a plurality of

simulation databases/memories where data from the databases are transferred/downloaded and used in testing all function of a PLC (*see col.8 line 63-col.9 line 48*), and that the downloading of data is substantially similar to copy from one place to another.

7.2 While the applicants believe that the independent claims along with their dependencies should be found allowable, the Examiner respectfully disagrees and asserts that the combined references cited teach the entire claimed invention, as evidenced by the rejection set forth below. The Examiner further asserts that the response to arguments along with the rejection below clearly support the Examiner's position in the rejection of the instant claims. *However, the Examiner highly encourages the Applicant to take a look at the additional references cited not used located in the conclusion section of this and the previous office action.*

Drawings

8. The drawings are objected to because they contain unlabeled rectangular and/or square blocks or boxes. The Examiner respectfully requests that these boxes be labeled in a way to assist in better viewing the claimed invention. **Furthermore,**

Figure 1,2a should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Bremner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

9.1 Claims 14-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 14-20, are merely directed to software per se; the Examiner respectfully notes that the arrangement, as claimed in claim 14, can be interpreted to be a program or code. [See MPEP 2106]

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10.1 Claims 14-21, 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the Examiner how the claims perform the verification of the control system. Although, the claims recites a step of performing a plurality

simulation process, the claims, as presented, do not set forth any step of simulating and verifying a control system of any kind, as claimed by the applicant.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11.0 Claims 14-21, 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Brayton et al. (U.S. Patent No. 6,823,280).

11.1 In considering claims 14, 21, 25, Brayton et al. discloses a computer implemented method for simulation and verification of a control system under development, comprising: an arrangement for performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein the memory modules include distinct memory locations for inter-module communication, and the system modules are dynamically reconfigured with each other (*fig.3-4, col.4 lines 18-62, col.5 lines 14-62; also see col. 8 line 63-col.9 line 48*).

11.2 Regarding claim 15, Brayton et al. discloses that the simulation is performed by running a control system simulation model, the simulation model including a number of sub-models being performed on one of the plurality of system modules, respectively (*fig.4, col.4 lines 18-62*).

11.3 As per claims 16 and 23, Brayton et al. discloses that at least some of the system modules are dynamically reconfigurable for communication via distinct memory locations (*fig. 3-4, col.5 lines 14-62, and col.6 line 58-col.7 line 10*).

11.4 With regards to claim 17, Brayton et al. discloses the cross-bar switch for dynamic configuration of the distinct memory locations (*fig. 3-4, col.6 line 58-col.7 line 40; also see col.10 lines 24-61*).

11.5 Regarding claim 18, Brayton et al. discloses that the interconnection scheme for coordination of the distinct memory locations (*fig. 4, col.4 lines 18-62, col.10 lines 24-61*).

11.6 As per claim 19, Brayton et al. discloses the host-target communication interface for connection of the simulation system with a simulation host, an input interface, and output interface (*col.1 lines 16-67; also see fig.4 col.3 line 1-col.4 line 62*).

11.7 With regards to claims 20 and 24, Brayton et al. discloses that the modules includes at least one output port server for communication interconnection with respective output service of the other modules (*fig. 1-2, col.4 lines 18-62*).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12.1 Stewart et al., Design of Dynamically Reconfigurable Real-Time software Using Port-Based Objects, 12/1997.

12.2 Gertz et al., a Software Architecture-Based HMI for Reconfigurable Sensor-Based control Systems, IEEE 1993.

12.3 Hassani et al., a Mechanism for Communicating in Dynamically Reconfigurable Embedded Systems, IEEE 1997.

14. Claims 1-13, 22, and 26 are cancelled and claims 14-21, 23-25 are rejected; **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Pierre-Louis whose telephone number is 571-272-8636. The examiner can normally be reached on Mon-Fri, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

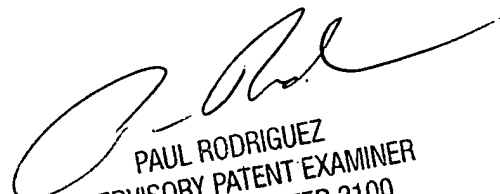
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December 10, 2007

APL



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